

## **REMARKS**

This is a full and timely response to the outstanding non-final Office Action mailed December 23, 2008. Upon entry of the amendments in this response, claims 1, 4 - 6, 9 - 11 and 14 - 21 remain pending. In particular, Applicants amend claims 1, 4 and 5 and cancel claims 2, 3, 7, 8, 12 and 13 without prejudice, waiver, or disclaimer. Applicants cancel claims 2, 3, 7, 8, 12 and 13 merely to reduce the number of disputed issues and to facilitate early allowance and issuance of other claims in the present application. Applicants reserve the right to pursue the subject matter of these canceled claims in a continuing application, if Applicants so choose, and do not intend to dedicate the canceled subject matter to the public. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

### **I. Rejections Under 35 U.S.C. §101**

The Office Action (page 6) indicates that claims 1, 4 and 5 are directed to non-statutory subject matter. As set forth above, Applicant has amended claims 1, 4 and 5 to overcome the rejections under 35 U.S.C. 101. The amended claims 1, 4 and 5 specify a “computer-implemented method”, which is tied to a computer (i.e., another statutory class, machine). Accordingly, the method specified in claims 1, 4 and 5 is considered a “process” under 35 U.S.C. 101. For this reason, Applicant respectfully requests that the rejections be withdrawn.

## **II. Rejections Under 35 U.S.C. §112**

The Office Action indicates that claims 16 – 21 stand rejected under 35 U.S.C. 112, first and second paragraphs. Applicant respectfully traverses.

In this regard, Applicant has used the term “tool” in accordance with its common and ordinary meaning. Notably, one of ordinary skill in the art that (in light of the manufacturing environment described in the specification) understands that “tools” are machines that process products. As such, Applicant respectfully asserts that the rejection under 35 U.S.C. 112, first paragraph, is improper and requests that the rejection be removed.

With respect to the rejection under 35 U.S.C. 112, second paragraph, and the limitation of “wherein the route information records a plurality of tools”, Applicant respectfully asserts that this limitation is readily understood by one of ordinary skill. That is, “wherein the route information records a plurality of tools” means the route information comprises a record of a plurality of tools. For example, a product P is processed by tool A, tool B, and tool C in sequence. Consequently, the route information of the product P records tool A-tool B-tool C. As such, Applicant respectfully asserts that the rejection under 35 U.S.C. 112, second paragraph, is improper and requests that the rejection be removed.

## **III. Rejections Under 35 U.S.C. §103**

The Office Action indicates that claims 1, 4-6, 9-11, 14 and 15 are rejected under U.S.C. 103(a) as being unpatentable over *Borders* (US Patent. No. 7139721). The Office Action also indicates that claims 16-21 are rejected under 35 U.S.C. 103(a) as

being unpatentable over *Borders* in view of *Shekar* (US Publication 2003/0208392).

Applicant respectfully traverses.

With respect to *Borders*, the Office Action (page 8) states that the ‘order history’ of *Borders* teaches the “historical customer delivery data of a customer” of claim 1 (see *Borders*, col. 15, lines 4-8). In addition, the Office Action (page 9) states that the “delivery time requirements” are part of historical purchasing data.

Accordingly, the Office Action regards the “delivery time requirements” as part of conventional historical purchasing data, induces the contents of conventional historical purchasing data into the invention of *Borders*, and states that the combination of *Borders* and conventional historical purchasing data teaches the “delivery time requirements” of claim 1. The aforementioned portions of the Office Action appear to indicate a lack of understanding and/or misapplication of the teachings of *Borders*.

According to *Borders* (col. 15, lines 4-39, for example), each customer is associated with a customer point value based on order history; the ‘customer point value’ is determined by summation of points based on factors such as shipment size and shipment frequency; and the factors are used to characterize ‘a level of customer activities’. As such, *Borders* implies that not all contents in the order history can be used to determine the customer point value, and only those that can characterize ‘a level of customer activities’ are suitable to serve as a basis for determining the customer point value.

In direct contrast, the “delivery time requirements” of claim 1 are “selected from the group consisting of fixed delivery time requirements, distributed delivery time requirements, and floating delivery time requirements”. Unlike the shipment size and

shipment frequency, whether delivery data of a customer specifies fixed, distributed, or floating delivery time requirements has little to do with ‘a level of customer activities’. For one of ordinary skill in the art, “delivery time requirements selected from the group consisting of fixed delivery time requirements, distributed delivery time requirements, and floating delivery time requirements” can hardly provide more insight in ‘the level of customer activities’.

Therefore, Applicant respectfully asserts that it is unreasonable to use “type of delivery time requirements” in the invention of *Borders*, since the “type of delivery time requirements” (which are “fixed delivery time requirements, distributed delivery time requirements, or floating delivery time requirements”) can hardly provide more insight in ‘a level of customer activities’.

In addition, the Office Action states that *Borders* discloses the step of “reserving production capacity for the customers in accordance with the different categories” (see col. 16, lines 41-54). According to *Borders*, the ‘capacity allocation history screen 1000’ and ‘target capacity allocation 1014’ (col. 16, lines 41-54; col. 17, lines 24-29), however, have nothing to do with the “production capacity”.

Based on the foregoing reasons, the teachings of *Borders* and the ‘old and well know art’ do not suggest all of the presently claimed features. As such, the proposed modification of the applied references CANNOT achieve the claimed subject matter. Accordingly, Applicant respectfully requests that the rejections be withdrawn as set forth in greater detail below.

**A. Claim 1 is Allowable Over Borders**

Claim 1 recites:

1. A computer-implemented method for capacity reservation based on historical customer delivery data, comprising the steps of:

acquiring historical customer delivery data of a plurality of customers, wherein the historical customer delivery data comprises ***delivery time requirements corresponding to each customer, wherein the delivery time requirements comprise requirements selected from the group consisting of fixed delivery time requirements, distributed delivery time requirements, and floating delivery time requirements;***

classifying the customers into a plurality of different categories according to the historical customer delivery data; and  
***reserving production capacity for the customers in accordance with the different categories.***

(Emphasis added).

The cited art is legally deficient for the purpose of rendering claim 1 unpatentable because the cited art does not teach or reasonably suggest at least the limitations emphasized above in claim 1. Therefore, Applicant respectfully requests that the rejection be removed and that independent claim 1 be placed in condition for allowance.

**B. Claim 6 is Allowable Over Borders**

Claim 6 recites:

6. A storage medium for storing a computer program providing a method of capacity reservation based on historical customer delivery data, the method comprising the steps of:

acquiring historical customer delivery data of a plurality of customers, wherein the historical customer delivery data comprises ***a plurality of delivery time requirements, wherein the delivery time requirements further comprise requirements selected from the group consisting of fixed delivery time requirements,***

***distributed delivery time requirements, and floating delivery time requirements;***

classifying the customers into a plurality of different categories according to the historical customer delivery data; and

***reserving production capacity for the customers in accordance with the different categories.***

(Emphasis added).

The cited art is legally deficient for the purpose of rendering claim 6 unpatentable because the cited art does not teach or reasonably suggest at least the limitations emphasized above in claim 6. Therefore, Applicant respectfully requests that the rejection be removed and that independent claim 6 be placed in condition for allowance.

### C. **Claim 11 is Allowable Over Borders**

Claim 11 recites:

11. A system of capacity reservation based on historical customer delivery data, comprising:

***a customer interface*** configured to acquire historical customer delivery data of a plurality of customers, wherein the historical customer delivery data comprises ***a plurality of delivery time requirements, wherein the delivery time requirements further comprise requirements selected from the group consisting of fixed delivery time requirements, distributed delivery time requirements, and floating delivery time requirements;***

a customer database configured to store the historical customer delivery data of the customers;

***a controller computer***, coupled to the customer interface and the customer database, the controller computer configured to ***classify the customers into a plurality of different categories according to the historical customer delivery data and reserving production capacity in accordance with the categories.***

(Emphasis added).

The cited art is legally deficient for the purpose of rendering claim 11 unpatentable because the cited art does not teach or reasonably suggest at least the limitations emphasized above in claim 11. Therefore, Applicant respectfully requests that the rejection be removed and that independent claim 11 be placed in condition for allowance.

**D. Claims 4, 5, 9, 10, 14 and 15 are Allowable Over Borders**

The Office Action indicates that claims 4, 5, 9, 10, 14 and 15 stand rejected under 35 U.S.C. 103(a) as being unpatentable over *Borders*. Applicant respectfully traverses these rejections for at least the reason that *Borders* fails to disclose, teach, or suggest all of the elements of claims 4, 5, 9, 10, 14 and 15. More specifically, dependent claims 4 and 5 are believed to be allowable for at least the reason that these claims depend from allowable independent claim 1. Dependent claims 9 and 10 are believed to be allowable for at least the reason that they depend from allowable independent claim 6. Dependent claims 14 and 15 are believed to be allowable for at least the reason that they depend from allowable independent claim 11. *In re Fine, Minnesota Mining and Mfg. Co. v. Chemque, Inc.*, 303 F.3d 1294, 1299 (Fed. Cir. 2002). Additionally, these claims recite other features that can serve as independent bases for patentability.

**E. Claim 16 – 21 are Allowable Over Borders in view of Shekar**

Claim 16 recites:

16. A system of demand and capacity management, comprising:  
an allocation planning module configured to receive a demand plan  
for a product from a participating customer;  
***a capacity model having route information for the product,  
wherein the route information records a plurality of tools;*** and  
***a capacity management module configured to reserve capacity  
according to the demand plan.***

(Emphasis added).

The cited art is legally deficient for the purpose of rendering claim 16 unpatentable because the cited art (either individually or in combination) does not teach or reasonably suggest at least the limitations emphasized above in claim 16. Notably, Borders is not involved with route information for the product. In this regard, the Office Action (page 12) states that *Borders* teaches “a capacity model having route information for the product, wherein the route information records a plurality of tools”. In the cited paragraph, *Borders* discloses “delivery information”. According to *Borders*, the delivery information is, for example, vehicle delivery routes, stops, etc. This is patentably distinct from “route information” that “records a plurality of tools” as recited in claim 16. Stated simply, “delivery information” of *Borders* does not involve “wherein the route information records a plurality of tools”. Therefore, Applicant respectfully requests that the rejection be removed and that independent claim 16 be placed in condition for allowance.

Since claim 16 serves as the base claim for claims 17-21, Applicant respectfully requests that the rejections of claims 17-21 be withdrawn.

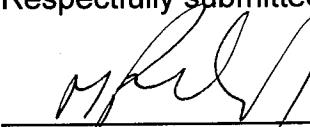
## CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above, Applicants respectfully submit that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested.

Any statements in the Office Action that are not explicitly addressed herein are not intended to be admitted. In addition, any and all findings of inherency are traversed as not having been shown to be necessarily present. Furthermore, any and all findings of well-known art and Official Notice, or statements interpreted similarly, should not be considered well-known for the particular and specific reasons that the claimed combinations are too complex to support such conclusions and because the Office Action does not include specific findings predicated on sound technical and scientific reasoning to support such conclusions.

If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,

  
M. Paul Qualey, Jr., Reg. No. 43,024

**THOMAS, KAYDEN,  
HORSTEMEYER & RISLEY, L.L.P.**  
Suite 1500  
600 Galleria Parkway N.W.  
Atlanta, Georgia 30339  
(770) 933-9500